DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-002864 Address: 333 Burma Road **Date Inspected:** 09-Jun-2008

City: Oakland, CA 94607

OSM Arrival Time: 630 **Project Name:** SAS Superstructure **OSM Departure Time:** 1530 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: C. M. Chen **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component:** OBG

Summary of Items Observed:

Caltrans Quality Assurance (QA) Inspector Tim McClendon arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island, in Shanghai, China to periodically monitor welding and Quality Control (QC) functions. While on site the QA Inspector observed and/or discovered the following.

QA Inspector, McClendon, observed the work being performed in Bay 2 of the New OBG. ZPMC personnel were performing various functions related to the fabrication of the OBG Side Plates and Bottom Plates as well as the deck sections in the jig fixture. The fabrication performed includes but is not limited to the preparation of areas where temporary welds for strongbacks are located, bevel preparation and welding of the Complete Joint Penetration welds (CJP) on Side Plates and Bottom Plates, heat straightening of Side Plates and Bottom Plates.

South Fabrication Bay OBG Assemblies

OBG Assembly Segment 3AE- The C5 Side Panel has been CJP splice welded to the bottom plate D6. Floor Beam assembly has been fit-up and welded at several locations.

OBG Assembly Segment 3BE- The C5 and E7 side panels have been CJP splice welded to the D6 bottom plate. The Floor Beam and the longitudinal diaphragms have been fit-up and welded.

OBG Assembly Segment 4AE- The C5 and the E7 side panels have been CJP splice welded to the D6 bottom plate. The FL1 Floor Beam has been fit-up and partially tack welded to the C5 side panel and the FL2 Floor Beam assembly has been fit-up and tack welded to the bottom panel.

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OBG Assembly Segment 4BE- The C5 Side Panel has been CJP splice welded to the bottom plate D6. The FL2 Floor Beam assembly has been fit-up and welded at several locations to the bottom panel and the FL1 floor beam has been fit-up and tack welded at several locations to the C5 side panel.

A ZPMC survey team was observed performing a significant amount of surveying measurements at various areas of the identified assemblies and the OBG assembly fixtures.

North Fabrication Bay OBG Assemblies

OBG Assembly Segment 4BW- ZPMC is in process of grinding the tack welds that have been applied to the C5 side plate to the D6 bottom plate CJP splice weld. The E7 side plate has not been fit-up to the opposite side of the assembly.

OBG Assembly Segment 4AW- The C5 and the E7 side panels have been CJP splice welded to the D6 bottom plate. ZPMC has performed the air arc gouging and grinding of the bottom (B side) side of the CJP splice welds. Welding and fit-up work on this assembly is minimal to idle.

OBG Assembly Segment 3BW- The C5 and E7 side panels have been CJP splice welded to the D6 bottom plate. The Floor Beam has been fit-up and welded at several locations. See Photograph below of Completed CJP weld on FL1-1 south to FL2-2.

OBG Assembly Segment 3AW- ZPMC has positioned the C5 side plate adjacent to the D6 bottom plate. This C5 to bottom plate is currently pending welding of the CJP splice weld.

A ZPMC survey team was observed performing a significant amount of surveying measurements at various areas of the identified assemblies and the OBG assembly fixtures.

General Note: All work observed today, unless otherwise noted, appeared to generally comply with the contract documents.



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Summary of Conversations:

No relevant conversations spoken on this date.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Pat Lowry, (858) 344-2712, who represents the Office of Structural Materials for your project.

Inspected By:	McClendon, Timothy	Quality Assurance Inspector
Reviewed By:	Cuellar,Robert	QA Reviewer